EXHIBIT A

Do ROI

88-891

m

Full R

2 wash-out curves

[redacted]

Want to see

Dyspersion - washout initially and then later echo

Used 3 part intensity standards for ROI measurements

Cat coil 180 - 232 axial

scout : XA - C

3A:8
2 for each slice

Sag. E24 XA - 56

Set 90 - 130 with OC

32 - 50 good

Auto - scales gen.

TR/TE - 2000/(

3 mm slice -
1mm sep
slice factor 3

occ @ F3

File Command

MCAO Pre 1:28

MM62A pre 1:28

Dyspersion

500 nmoles/~~[illegible]~~ ml - 500 nmoles/ml

1 mmol/kg or lower. .5 nmoles/ml

TE = 50

.5 nmoles/1 ml • x = 2.4 nmoles

inject 4.8 ml - injected over 5 min.

Start inject at scan 30 or so want it all in by maximum echo.

Minutes
Scan
time

MCAO Post 1:45 OC - 49 CU - 40 RA - 2 - MM62B

Post 1:58 - MM62C

Post 2:10 MM62D

S-043 (Dyzprosium DTPA) Non-ionic Contrast M
MCA-O MODEL

11 2.4 kg injected i.v. c 65 mg/Kg Nembutal (≈1.3ml)

MCA surgery
Dose 1.13 MCA-O Ⓡ thermocautery + transection
1.16 in CSI
ct MAP 117 mmHg
1:40 T_2W multislice suggests ipsilateral edema LV
1:50 ~~BP~~ MAP drop from 110 → 90 during injection
1:45 S-043 INJECTION OVER 3 MIN AT 1mM/Kg = 2.4mM (4.8n
-1:49
1:54 MAP 104 mmHg
2:20 MAP 108 mmHg
5/00 2:45 Completion of 4 series of T_2W (TR/TE 2800/80) coronal multislice images from septum to midbrain (MCA territory)
M62A 1ST T_2W precontrast post MCA-O → high signal (t = 1:28 pm)
M62B 2nd T_2W 1-12 min post contrast (contrast 1:45 (t = 1:45 → 1:57
M62C 3RD T_2W (t = 1:59 → 2:11
or 3/4 M62D 4th T_2W (t = 2:12 → 2:2
M62E 5th T_2W (t = 2:47 → 2:6

3:00 MAP 112 mmHg

3:15 MAP 117 mmHg
1:28
4:30 MAP 110 mmHg

4:38 ↕ 4:41 ≈ 3 minute contrast injection, moderate hypotensive effect 110 → 111

4:40 MAP 113 mmHg

4:41 MAP 110 mmHg stopped inject

by 5:30 MAP 108 mmHg

62B 5:35 MAP 114 HR 150 .3ml Nembutal i.v. MAP 110 mmHg HR 160 bpm
62C
62C

[redacted]

~~XA~~ XA-2C - E24. 128 x256 x4.

MRG2 F - 3;13
TR 1000/50 NA2 GN 30 BPS 0
5 mm slice got a severe partial volume averaging effect.
Went to 3mm slice. (Note: remember need to change de phase and Crusher!)

ADC! see MR ABC of APP on 0

MRG2 G
H
I
J
K
L
M
~~N~~

TR-1300
TE-60

BPS = 1414
BB = 2000
~~2028~~
4,02
5656
8,000
11312

sort data => No!

diffusion coefficient of pure H_2O is 2.5×10^{-3} mm

2800/50
NA/2
OC-49
pre-4:23
→ E24

MRG2 N → Cut the slice echo off screen at 4313
4:23
O - post - 4:35
P - post - 4:48
Q - post - 5:02
R - post - 5:37

E24 images stored in files : 1324
Procedure
Check OC
CL => ~~compi~~ compile + load
BO => 128 don't sort
input file name
1324 → S1 - S4 dat files

start injection of scan 3 min
inject at t to C1

Wakeup
XA 2C
MR G2 N
window size 16
SI: 5

4:25 Pre-contrast T2W coronal multislice (TR/TE 2800/80)
-increased cortical + BG signal intensity

4:35 Start 1st post-contrast T2W
-high signal cortical + BG (non perfused)
4:48 Start 2nd post-contrast T2W
5:02 Start 3RD post-contrast T_2W
5:37 Start 4th post-contrast T2W.

6:30 0.3 ml Nembutal i.v.

7:05 Nembutal overdose

50 ml transcardial 2% TTC
brain removed after 20 min - immersed in TTC for 5 min
stored in 10% buffered formalin for 24 h

[redacted] Coronal sections 5-7 mm thick show infarcted tissue through MCA-O Ⓡ territory

Close correspondence with T2W MRI appearance

LO214A.DAT 2800/80 3/4 OC 52

11.9 minutes 9~50

1 - 4
5 - 8
9 - 12
10 11
13 14 15 16

Tape Backup

I · initialize
W
MM62*.dat
Command?
A.
File name :

Command?
A
File name: MM63*.DAT
Command?
A
File name: MM61*.DAT
Command?
B → tape back to beginning
Command?
Q → Quit

- HANG

Contrast

MI
C → either knobs
or K input K's
Start with 70/120

Tape Read

M
R* - read all subsequent files
take tape off-line

.DST

window 41-71

left to right reversed
ROI

XM.2C
xy.3
CM 20/20

GG
call up middle
128 ⇒ ys ↓ scale larger val

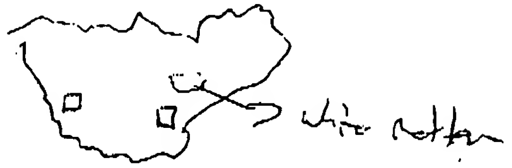
CV
3 levels

↓ down
↑ contour level

✓ Rename S1 - S4
✓ M1 - M4
✓ N1 - N4
✓ O1 - O4
✓ P1 - P4
✓ Q1 - Q4

From listing image comment: Control D

1. Pick one RoI thru M1, N1, O1, P1, Q1
when yellow type Z ⇒ red box
⟷ in and out box side
↕ up and down
I = returns integral of box.
total 320 RoI's



type I ⇒ integral
return
return
Q
CV N1
return
return

Choose 2.5 x 2.5 voxel

S - xw - 2.5
yw - 2.5

Exp. 25-40
pos - 300
CNT - 300 10
brightness - 10
exp - 25 - frame 1
hit pos.

exp - 30
position - 2
exp

AI - C
start at 70 - 120
↓

Ted CSI.ANN

Spectra
x-y - 3
CB - Co/C

AN - I
CSI.ANN
AN - S

Q
Colse
G ERCSI
CC File
AN
T ←
CSI ANN